Water-Data Report 2013

11469000 Mattole River near Petrolia, CA

Mattole River Basin

LOCATION.--Lat 40°18′48″, long 124°16′56″ referenced to North American Datum of 1927, in SE ¼ NW ¼ sec.10, T.2 S., R.2 W., Humboldt County, CA, Hydrologic Unit 18010107, in Humboldt meridian, on downstream side of bridge, on left bank, 0.2 mi downstream from Mill Creek, 0.5 mi southeast from Petrolia Post Office, 0.6 mi upstream from North Fork, 0.8 mi south of Petrolia, and 20.6 mi south of town of Fernbridge.

DRAINAGE AREA.--245 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1911 to December 1913, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1315-B.
CHEMICAL ANALYSES: Water years 1959-79.
WATER TEMPERATURE: Water years 1966-78, 2001-03 (storm season only).
SEDIMENT DATA: Water years 2001-03 (storm season only).

REVISED RECORDS.--WSP 1285: 1912-13. WSP 1929: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 49.41 ft above NGVD of 1929. November 1911 to December 1913, nonrecording gages at several sites within 0.3 mi upstream at various datums. Dec. 11, 1950, to July 14, 1955, at site 0.3 mi upstream at datum 7.48 ft higher. July 15, 1955, to Oct. 26, 1967, at site 0.4 mi downstream at different datum. Oct. 27, 1967, to Oct. 30, 1996, at site 1.1 mi upstream at datum 7.00 ft higher.

REMARKS.--Records good except for flows above 2,700 cfs, which are fair. Diversions for irrigation of about 350 acres upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90,400 ft^3/s, Dec. 22, 1955, gage height, 36.60 ft, site and datum then in use, from rating curve extended above 26,000 ft^3/s, on basis of slope-area measurement of peak flow; minimum daily, 11 ft^3/s, Sept. 5-13 2008.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 2	0900	*39,700	*26.55
Dec 23	1600	15,700	20.29

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 11469000, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/11469000.2013.pdf

11469000 Mattole River near Petrolia, CA—Continued

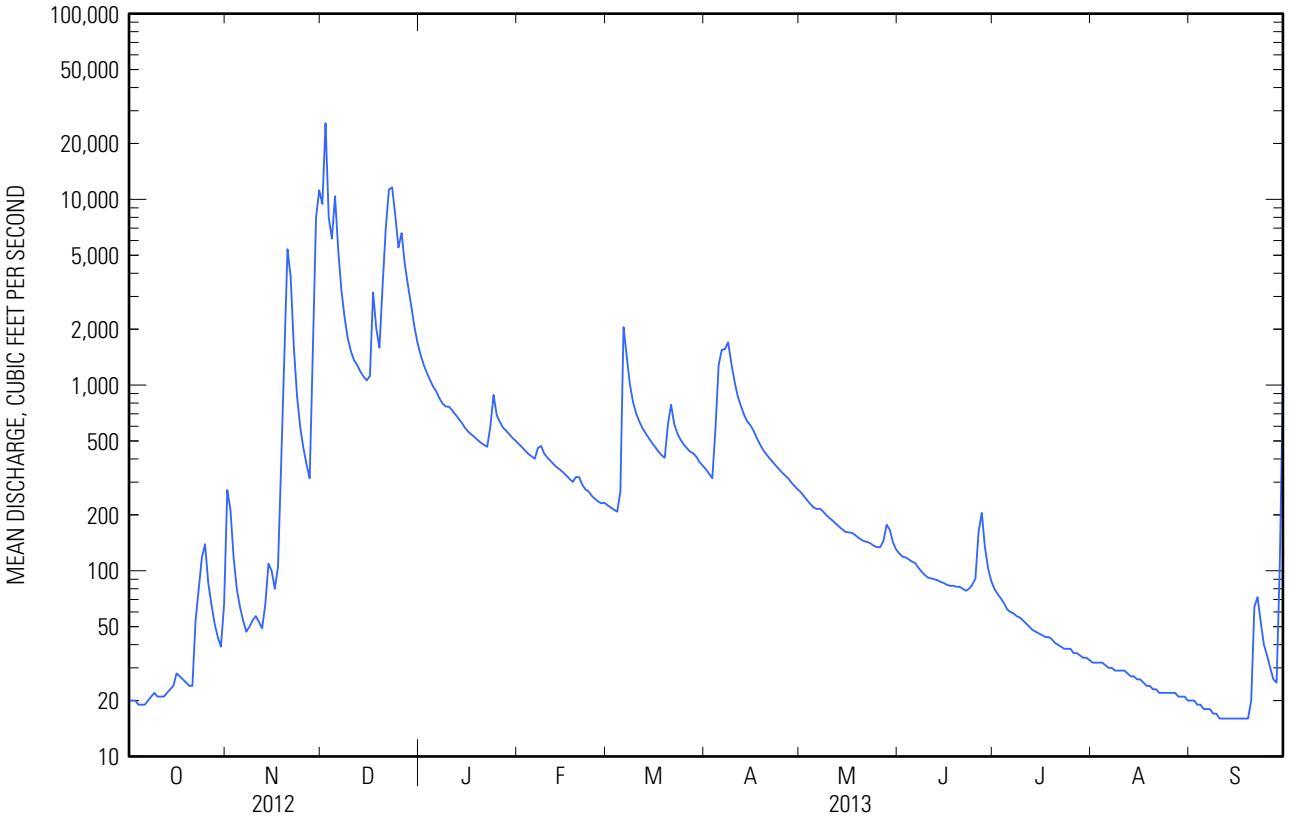
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	20	272	9,450	1,450	481	225	351	264	124	80	32	20
2	20	213	25,700	1,280	462	219	333	251	119	75	32	20
3	20	118	8,020	1,160	443	213	315	239	118	71	32	19
4	19	80	6,150	1,060	426	208	581	228	115	67	32	19
5	19	64	10,400	978	413	267	1,280	219	112	62	31	18
6	19	54	5,330	919	401	2,050	1,550	215	110	60	30	18
7	20	47	3,240	843	459	1,430	1,560	216	104	59	30	18
8	21	50	2,320	791	470	1,010	1,700	208	99	57	29	17
9	22	54	1,790	766	427	809	1,310	199	95	56	29	17
10	21	57	1,520	763	406	701	1,050	192	92	54	29	16
11	21	53	1,360	729	390	635	874	186	91	52	29	16
12	21	49	1,280	693	374	585	774	179	90	50	28	16
13	22	66	1,180	658	360	549	693	173	89	48	27	16
14	23	109	1,110	625	350	517	638	167	87	47	27	16
15	24	100	1,060	588	338	488	608	162	86	46	26	16
16	28	80	1,120	561	325	463	568	161	84	45	26	16
17	27	105	3,150	542	312	439	520	160	83	44	25	16
18	26	378	2,020	525	301	419	481	156	83	44	24	16
19	25	1,430	1,590	506	320	406	448	151	82	43	24	16
20	24	5,390	3,430	489	319	613	425	147	82	41	23	20
21	24	3,820	6,990	476	290	783	404	144	80	40	23	64
22	54	1,600	11,300	465	274	615	386	143	78	39	22	72
23	80	875	11,600	600	267	548	369	140	80	38	22	53
24	118	597	8,210	884	253	507	353	136	84	38	22	40
25	139	460	5,510	688	244	478	338	134	91	38	22	35
26	86	374	6,580	633	236	457	326	134	162	36	22	30
27	66	315	4,480	589	231	438	314	145	205	36	22	26
28	52	1,540	3,440	567	232	429	298	177	134	35	21	25
29	44	7,960	2,690	542	---	411	285	166	103	34	21	105
30	39	11,200	2,080	519	---	384	274	142	88	34	21	1,010
31	66	---	1,690	500	---	368	---	130	---	33	20	---
Total	1,210	37,510	155,790	22,389	9,804	17,664	19,406	5,464	3,050	1,502	803	1,806
Mean	39.0	1,250	5,025	722	350	570	647	176	102	48.5	25.9	60.2
Max	139	11,200	25,700	1,450	481	2,050	1,700	264	205	80	32	1,010
Min	19	47	1,060	465	231	208	274	130	78	33	20	16
Ac-ft	2,400	74,400	309,000	44,410	19,450	35,040	38,490	10,840	6,050	2,980	1,590	3,580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	202	1,237	2,964	3,456	2,988	2,309	1,234	551	227	84.5	48.3	53.9
Max	1,900	7,159	8,340	8,928	10,710	7,929	5,225	1,842	1,338	283	164	237
(WY)	(1951)	(1974)	(1956)	(1970)	(1958)	(1983)	(1963)	(1960)	(2005)	(2005)	(1983)	(1977)
Min	16.2	41.8	39.7	135	243	187	166	151	68.9	31.3	18.9	12.5
(WY)	(2003)	(1960)	(1977)	(1977)	(1977)	(1988)	(1988)	(1970)	(1977)	(1977)	(2008)	(2008)

11469000 Mattole River near Petrolia, CA—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1912 - 2013	
Annual total	515,759		276,398			
Annual mean	1,409		757		1,273	
Highest annual mean					2,642	1983
Lowest annual mean					157	1977
Highest daily mean	26,700	Mar 30	25,700	Dec 2	55,200	Dec 22, 1964
Lowest daily mean	19	Sep 15	16	Sep 10	11	Sep 5, 2008
Annual seven-day minimum	20	Sep 30	16	Sep 10	11	Sep 5, 2008
Maximum peak flow			39,700	Dec 2	90,400	Dec 22, 1955
Maximum peak stage			26.55	Dec 2	36.60	Dec 22, 1955
Annual runoff (ac-ft)	1,023,000		548,200		922,500	
10 percent exceeds	3,430		1,440		3,360	
50 percent exceeds	270		167		275	
90 percent exceeds	23		22		34